

**ABSTRACT OF THE DISCLOSURE**

A method and composition for removing a bottom anti-reflection coating (BARC) layer from semiconductor substrates having such BARC layers is described. The removal composition includes a supercritical fluid, a co-solvent, an etchant and a surfactant. Such removal compositions overcome the intrinsic deficiency of  $\text{SCCO}_2$  as a removal reagent, viz., the non-polar character of  $\text{SCCO}_2$  and its associated inability to solubilize species such as inorganic salts and polar organic compounds that must be removed from the semiconductor substrate.